



THOMAS G. NEWMAN,
EDITOR.

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EDITORIAL BUZZINGS.

Honey and Bees at the Maine State Fair will have attention in our next issue, by an article written for the AMERICAN BEE JOURNAL by our friend, Mr. L. F. Abbott, editor of the Lewiston *Journal*.

At the Iowa State Fair, Mr. Geo. W. Penn, of Colfax, Iowa, took three premiums—first premium on fall extracted honey; first on beeswax, and second on fall comb honey. We congratulate him on his exhibit, which must have been a good one to have merited these premiums. Those who took the rest of the ribbons will no doubt report soon.

Prof. C. C. Blake predicts that the year 1890 will be one of very great extremes, both as to temperature and rainfall. He has published an Annual (price \$2) for 1890, which he says "points out what the temperature and rainfall will be from July, 1889, to Jan. 1, 1891, in all parts of the United States and most of Canada and Europe; with advice to farmers as to what crops to plant and when, so as to avoid the unfavorable weather, and to raise fair to good crops in spite of fate and hard luck. Without this advance knowledge, it is mathematically certain that very extensive crop failures will occur next year in many parts of the country."

Notable Old Men is the subject on which that enterprising and gossipy paragraphist, Mr. Blakely Hall, wrote for *Frank Leslie's Weekly* last week. Everybody is reading his weekly contributions with peculiar interest, and this is one of the breeziest of all. The American beauty presented this week is Mrs. J. W. Mackay. She makes a handsome picture.

Digested Nectar.—We are very much surprised to find the following from Prof. Cook in *Gleanings in Bee-Culture* for Sept. 1, 1889:

Our friend Demaree has now a recruit—a doctor. This doctor—see the AMERICAN BEE JOURNAL—makes several assertions that just a little knowledge of chemistry would have prevented. Is it possible that our "M. D.'s" know nothing of chemistry? Such articles may possibly be excused in a lawyer, but from a doctor they are certainly indefensible. Even a lawyer should not attempt to enlighten the public on what he knows nothing about. His ignorance may be excusable; his misrepresentation and pose, as a teacher, are more venial. To say that nectar and honey are the same, or that sugar syrup fed to bees is identical with the honey placed in the comb, is to show entire ignorance of the subject. It is too bad that such men will write.

Now, Mr. Editor, why do not you editors get a little blue litmus paper and a little copper sulphate, or, better, Fehling's solution, and prove for yourselves the truth of this matter? Then when such articles are sent in, throw them into the waste-basket. You would not insert an article about the king-bee. To say that honey and nectar are the same, is as absurd as to say that there is a king-bee.

We are astonished at the above quotation! Our great esteem for the writer will prevent us from returning the compliment. Editors try to advance the interests of the pursuit, and not to play the tyrant. If they were to refuse to publish everything which did not agree with their views, or the theories of those in authority, there could be no advancement, and progressive knowledge would be at a stand-still.

Ridicule is not argument—neither are arrogant assertions and contemptuous epithets conclusive evidence. They rather indicate the lack of evidence, and the weakness of the cause which they are called upon to bolster up. We are therefore very sorry that the Professor should have seemingly invoked their aid.

Dr. McKinney has another article in reply to Prof. Cook, on page 616 of this issue. When professors, doctors and lawyers fail to agree—who shall decide the questions at issue?

To throw such articles into the waste-basket will no more prove their falsity than the thrusting of Galileo into the Inquisition proved that the world did not revolve on its axis! False theories can only be disproved by overwhelming and convincing arguments.

We have a particular relish for debate, but we loathe uncourteous personalities and quarrelsome contention. We enjoy either hearing or reading intellectual conflicts. The more courteous the controversy, the more profound is our admiration for it, and the more penetrating are the arguments, as a general thing.

Our good friend, Prof. Cook, we feel sure must have failed to give his article in *Gleanings*, that mature reflection which he should have done, and will be very glad, no doubt, to modify it when he realizes the peculiar position in which it now places him. He evidently penned it in an unguarded moment.

Fire has destroyed the fine exhibit of friend Emerson T. Abbott, at the St. Joseph, Mo., Exposition. The main building was entirely destroyed on the night of the 15th inst., entailing a loss of a quarter of a million of dollars, and the loss of one life.

All will sympathize with Mr. E. T. Abbott; his loss is a heavy one. He had an exhibition about all in value of what he possessed, and in one hour it was swept out of existence; and as he had no insurance, the loss is a total one. We wonder at his not taking out an insurance policy, especially when we think of his shrewd business qualities! How nice eight hundred or a thousand dollars would be to him now, in the hour of calamity. Let all take a lesson from this disaster, and insure their property against loss by fire.

Mr. Abbott has a determination, and will at once prepare to start again in the world, pay his debts, and resume his business. He is just the man that reverses cannot crush, and we bespeak for him an increased trade next season, as well as that sympathy which should flow from friend to friend.

The St. Joseph *News* of Monday contained a full account of the fire, and from it we take this item about the honey exhibit:

Crowds began to arrive from the city, which but added to the confusion. Exhibitors paced anxiously up and down the muddy paths, muttering and bemoaning their fates. Others took the matter philosophically. One poor fellow, his hat off and his arms folded, stood watching the burning building. "There goes all I have in the world," said he. "The result of five years' labor I placed in that building, and now I haven't fifty cents." It was Emerson T. Abbott, who had a bee and honey exhibit.

The Fall Crop of Honey, like all other crops, has varied in different locations. In some it has been large, in others only of medium size. Mr. C. H. Dibbern, of Milan, Ills., on Sept. 19, 1889, wrote thus concerning his fall crop:

"We have had frosts during the last two nights, and the honey harvest for 1889 is now over. The fall crop has not come up to our expectations; probably not more than one-half the usual fall crop has been secured. Still, as we had a full crop of white honey, we ought to be content."

Proud of the Volumes.—Dr. J. M. Hicks, of Indianapolis, Ind., thus writes of the pleasure he experiences in reading the numbers of the ILLUSTRATED HOME JOURNAL, and of his intention to bind them for his library. He says:

Its make-up is certainly of the best, and when the full numbers for the year 1889 are at hand, I intend to have the book well bound worthy of its merits, and add it to my many valuable books, such as Shuckard on the Humble and British Bees, as well as the several volumes of the AMERICAN BEE JOURNAL, National Bee Journal, Moon's Bee World, and many others I might mention, which are already bound and in my library, all of which I have saved for years, and prize very highly.

Circumstances beyond our control prevented our attending the Detroit Fair.

GLEAMS OF NEWS.

Of Real Value to Bee-Keepers.

—Mr. C. H. Dibbern writes to the *Western Pawman* a resume of the Arkadelphia law-suit, and the decision of the Supreme Court that bee-keeping is not a nuisance *per se*. He then adds :

This decision is of real value to bee-keepers, and is the first case of the kind decided by the Supreme Court and State. Hereafter people having imaginary grievances against bee-keepers will likely think twice before commencing petty suits. Bee-keepers will hereafter be responsible for the real damage that may be caused by their bees, just like any other property. More than that, no bee-keeper ought to ask.

Now while this suit was ostensibly carried on by Mr. Clark, the Bee-Keepers' Union was the "power behind the throne," and it has cost a good deal of money. Mr. Clark, being a poor man, could not have afforded the expense to carry the case to the higher court, and employ first-class legal talent. The management of the Union deserve great credit in this, as in all other cases it has ever taken up, never having lost a case.

The first thing the Union does when a case of any member comes before it, is to determine if the case is a just one. If not, he is advised at once, and a satisfactory settlement is soon made. If he is in the right, he is helped in his defense to the last.

Now is it not very strange that all bee-keepers do not belong to the Union, when all possible assessments amount to but \$1 per year? Yet, strange to say, the membership is still less than 500, when it should be at least 10,000.

Some bee-keepers may have been kept out, by being afraid of becoming involved in lawsuits, but are they not much more liable to become involved in such suits by staying out? Then, too, is it not worth something to give our mite to protect a worthy man, like Mr. Clark, in his rights.

Yes, Brother Dibbern, the bee-keepers are standing in their own light in not joining the Union by the thousand. The few who have joined the Union have demonstrated what can be done in defending the pursuit. Now, if the mass of those interested, persist in withholding their influence, the Union will be unable to cope with the enemies of bee-keepers, for lack of funds; and its failure to do so, will be charged rightfully to the apathy of bee-keepers themselves—not to the weakness of the management.

The Chicago Convention will be held on **Friday and Saturday, Oct. 11 and 12, 1889.** The Railroad Traffic Association has made a rate of one fare for the round trip from any point within 200 miles of Chicago, good on Oct. 10, and can be used on any train returning after that until Monday, Oct. 14. The first session will be held at 9 o'clock in the morning of Friday, and an adjournment can be had on Saturday afternoon in time for those who may wish to return on that day. Those who can remain over Sunday will have an opportunity of visiting our magnificent churches and cathedrals in the morning and evening, and of taking a pleasant walk in the parks or riding on the boulevards in the afternoon, as their inclination and tastes may lead them.

Mr. C. Schliesmayer, of Pasadena, Calif., has sent us two large views of his apiaries. One is his home apiary, and the other is one up in the mountains. He has another apiary, the best of all, but these views show that he is an extensive apiculturist. In the present poor season he has obtained 6,300 pounds of honey in the comb, and 900 pounds of extracted. The Pasadena *Star* of July 23, makes the following mention of his honey crop :

The most successful honey-producer in the county, C. Schliesmayer, drove past the *Star* office this morning with a thousand pounds of the whitest, purest-looking comb honey that bees are capable of producing, which he had just taken from his hives in the mountains north of town. It is the third load that he has taken to Los Angeles this summer, all of it beautifully put up in boxes with glass ends. Mr. Schliesmayer disproves in the most emphatic way the assertion that bee-keeping cannot be made successful in this vicinity, for a finer article than he produces would be difficult to find in California.

Mr. S. has sold his comb honey at 12½ cents per pound, and expects to sell the extracted to the same firm for 8 cents per pound.

He says : "I owe the *AMERICAN BEE JOURNAL* for much that I know about bee-keeping, and offer to the Editor my thanks and gratitude. I have been in the business for nearly 20 years; but I have learned more about it in the past few years, since I have read the *BEE JOURNAL*, than I ever knew before."

The photographs are placed into our *BEE JOURNAL* Album, with thanks.

The Vermont State Fair was held during the first week of this month, and was a great success. Heretofore the managers have offered no premiums for aparian products, but this year they have done so, and this is what the Rutland *Herald* says about the exhibit :

An exhibit that attracts much admiration is that of J. H. Larrabee, of Larrabee's Point, who shows a large amount of fancy comb and extracted honey, as well as a colony of bees, including the queen, in a glass hive. A machine for pressing comb foundation is shown in operation, and full descriptions of the methods of his busy honey workers are cheerfully given to all inquiries. All the different publications relating to bee-culture are given to interested parties, as well as samples of the comb foundation. This is the first year that premiums have been offered for bees and honey, and it is hoped that hereafter a large number will compete for them.

Bee and honey shows are the attractions wherever they are suitably encouraged.

Mistakes of Bee-Keepers was the subject matter of the *Bee-Keepers' Review* last spring. Among the mistakes enumerated by the correspondents were—rearing poor queens; overstocking a locality; too much increase; too many irons in the fire; too much confidence in the statements of persons over-enthusiastic on some particular point, etc.

Convention Hand-Book.—As the convention season is just approaching, we want to direct attention to the little book which every bee-keeper needs when attending these gatherings. Here is what Mr. J. E. Pond says about it :

DEAR EDITOR :—Your little "Convention Hand-Book" is really a very handy thing. At two or three different times I have been called on to get up something for special occasions, and I have found the "Hand-Book" just the thing to save me quite an amount of time and labor, as it was a very simple matter to use the "book" as a basis, making only such few changes as were necessary to fit the special time and place.

I can cordially recommend it to any one who may desire not only information, but a perfect form for organization of a convention of any kind of a convention, as it will "fill the bill" completely.

Every Hand-Book contains a simple Manual of Parliamentary Law and Rules of Order for Local Bee-Conventions; Constitution and By-Laws for a Local Society; Programme for a Convention, with subjects for discussion. They sell at 50 cents each, and are nicely bound in cloth covers.

We make every subscriber this offer: Go and call on your neighbor who keeps bees and ought to take the *BEE JOURNAL*. Get his subscription and one dollar for a year; send it to us, and we will present you a copy of the Hand-Book for your trouble—by mail, postpaid. Here is a grand chance for all to get a valuable book without costing them a cent!

A New Serial Story. entitled "Heron's Wife," by Etta W. Pierce, is begun in the October number of *Frank Leslie's Popular Monthly*. The color, picturesqueness and dramatic force of this novelist have already given her a reputation as a sort of American Ouida—a reputation which this latest work from her pen will fully sustain. The literary and artistic features of this number of the magazine are even more profuse than usual.

The National Flower.—A vote was taken, as we are informed by Mr. L. F. Abbott, at the Maine State Fair, on Thursday, the third day of the Fair, by Mr. D. H. Knowlton, Secretary of the Maine Pomological Society, and resulted as follows: Golden-rod 155, lily 14, rose 13, sunflower 8, and arbutus 6. "Straws show which way the wind blows."

A correspondent on a farm requests us to record his "vote for the morning-glory, because the golden-rod is not a distinctive flower—only a weed." This reminds us of what a farmer from Jersey county, Ills., wrote to an exchange on this very subject. He says :

When it comes to putting such a detestable vine as the morning-glory ahead of the golden-rod, I think the average farmer will hold up his hands in horror, for if, in this locality, there is a weed more complained of and more hard to eradicate than the morning-glory, I have yet to find out what it may be. Corn-fields are ruined by it, and the only way to get rid of it is to change crops. I never knew any one to be damaged by the graceful golden-rod, whose golden plumes nod and sway with a willowy grace unrivaled by any other flower.

The golden-rod is "our choice, first, last and all the time."

A Novel Idea.

A novel attraction in the shape of a palace of black diamonds is to be seen on the Sangamon Fair association grounds at Springfield, Ills. The entire structure is in reality a palace of coal, as it is built of rough blocks of coal dug out of the Sangamon county vein.



THE COAL PALACE.

Owing to the shortness of time at the disposal of the operators who were putting up the palace it is necessarily somewhat limited in its dimensions, but it is big enough to make a very imposing appearance. Bullard & Bullard are the architects of this building, which is certainly a picturesque feature of the Sangamon fair and Springfield's exposition. The original idea was suggested by The Illinois State Journal to Col. Charles F. Mills, secretary of the association, and in two days he had the coal operators of the city thoroughly alive with the novel idea of drawing attention to the coal of their county by erecting a palace of coal on the fair ground. The formal opening of the palace was attended with much ceremony. Senator Shelby M. Cullom delivered an address on "Coal in Commerce" and Pat H. Donnelly, late secretary of the Illinois Miners' Protective association, one on "Coal Miners," and there were also several other addresses.

Senior and Junior.

The use of "Jr." is simply to denote the younger of the same name. In the case of uncles or grandfathers residing in the same community it would be a convenience for all concerned (where the name is the same) to have the nephews or grandsons use "Jr.," while the older persons used "Sr." for senior. The significance of 1, 2 and 3 is simply to denote different persons of the same name. In congress, when two or more members of the same name appear on the list, the name of the state each comes from is printed within parentheses. Where there are more than two of the same name in a family 1, 2 and 3 are sometimes used.

Set and Sit.

Discriminate between set and sit. To set means to put, to place, to plant, to fix. To sit means to rest on the haunches, to remain in a state of repose, to perch as a bird, etc. We set apart, set aside, set about and set down (some article), or (in writing). We sit up and sit down. We set a hen, and a hen sits on eggs. We should say, therefore, "as cross as a sitting (not setting) hen."

The Busy, Buzzing Bees.

Words by GEO. W. YORK.

German Air.

Allegro.

1. Buzz, buzz, buzz, O - ver fields, oh so fair, Where the bees in la - bor share,
 2. Buzz, buzz, buzz, Not a bee has a fear, And no i - dle - ness is here;
 3. Buzz, buzz, buzz, Ev'ry bee till the night Is so hap-py in its flight,
 4. Buzz, buzz, buzz, In this life we should work, And like bees nev - er shirk,

cres.

Clovers sweet, blossoms rare, There's where nectar's found, Oh, so bus - y
 Bus - y they, far and near, —Hon - ey get with care. Bees in sun - ny
 Nev - er tires, al - ways bright, Car - ing not for rest. Learn a les - son
 For there's no place to lurk— Do our du - ty well; Then at last when

all the day, Mong the flow - ers do they stay, Ev'ry bee ver - y gay,
 hours a - mong Fields of flow'rs with joy - ful song. Happy strains they prolong,
 from the bee As it toils for you and me, Oh so free and you see,
 life is o'er, And of toil we do no more, We shall live on that shore

CHORUS.

Hon - ey all a-round, In this blooming field all day, Flowers grow in
 Ring - ing in the air.
 Does its ver - y best. *Chorus for 4th stanza.*
 Where the an - gels dwell. In that hap - py home above, Where there is naught

bright ar-ray, Bees are there in the air, Hon - ey ev - 'ry - where.
 but true love, We shall be free from care, Mu - sic ev - 'ry - where.

The Busy, Buzzing Bees., set to music on this page, is eminently fitted for use at Conventions. The words are excellent, and are just suited to the music. Those who are intending to go to the Conventions this fall will be delighted with this song, and will, no doubt, have the music as well as the words thoroughly committed to memory, so as to make "merry music" wherever they may be.

The Queen Breeders' Journal has been consolidated with the *Western Apriarian*, and the September number of the latter comes out with many additional pages. There is much room for improvement in its typographical appearance, but we hope that time and experience will accomplish that, and make it a credit to the craft. We wish it success, and with that will no doubt come the improvements.

From Two Stand-Points.

To be a woman—direst woe,
The rights of men she ne'er can know.
She cannot cast the mighty vote,
Or sound the ringing campaign note.

To be a woman—happy state,
To govern man and guide his fate,
She takes the middle of the street,
And in the horse-car gets a seat.

She has her say—more than enough—
And has it, too, without rebuff.
Creation's king, a man, is seen
'Most always vanquished by the queen.

QUERIES AND REPLIES.**Square or Round Ends in the Zinc-Perforations.**

Written for the American Bee Journal

Query 655.—Should the perforations in the metal used for excluding queens have square ends or round ones?—ILLIS.

Round ones.—A. B. MASON.

I think that it does not matter.—J. P. H. BROWN.

I doubt if it makes any difference.—C. C. MILLER.

I would prefer round ends.—M. MAHIN.

It makes no difference which, in my opinion.—G. M. DOOLITTLE.

I have used only right-angled openings. They work well.—A. J. COOK.

I do not see as it makes any difference. Perhaps round ones.—MRS. L. HARRISON.

I think that it makes very little difference.—C. H. DIBBERN.

The round ones have worked more satisfactorily with me.—W. M. BARNUM.

I think that the difference in results are too insignificant for consideration.—R. L. TAYLOR.

They are oblong with square corners, in what I have.—MAHALA B. CHADDOCK.

I do not know. I have never used any but square-cornered perforations.—EUGENE SECOR.

I will leave this question for others better qualified to answer.—J. M. HAMBAUGH.

Round ones may be an improvement, but I do not find any objection to the square ones.—P. L. VIALLON.

We would prefer long, round-end perforations, if we used queen-excluders.—DADANT & SON.

I prefer the round ends, as in my experience the bees are not so apt to fill them with propolis.—J. E. POND.

I have never seen but one "make" of the perforated-zinc that had round ends to the perforations, and the workmanship of this "make" was so

inferior that I would not use it. The square-end slots give perfect satisfaction in my apiary, if the work has been nicely done. I regard the perforated-zinc excluders one of the greatest of our modern helps in the apiary.—G. W. DEMAREE.

Well, I do not know which are best, because I have had perfect success with both. Perhaps there is not enough preference to amount to enough to give it investigation.—JAMES HEDDON.

I should prefer the round corners, especially if I were manufacturing it. The sheets would be stiffer, and less liable to break at the corners. The punches and dies would last longer, with little danger of breaking in hardening and tempering.—H. D. CUTTING.

I do not think that it makes any difference. A more important question is, how to facilitate the passage of bees through perforated-zinc? But that question is fully answered in a properly constructed wood-zinc honey-board.—G. L. TINKER.

I do not think that it makes any difference. The sharp edges left in the metal by the dies, are my objection to perforated metal. Perhaps galvanized iron, punched a trifle large, and then "dipped" again, would be better than the metal now in use.—J. M. SHUCK.

The difference is not worth consideration, if the perforations are smoothly cut, so as not to leave any sharp edges.—THE EDITOR.

Making a Bee-House for Wintering Bees.

Written for the American Bee Journal

Query 656.—Last year I had only 3 colonies, and had them in the cellar, but I have 12½ now, and I cannot keep them in the cellar very well next winter; so I would like to know if a bee-house built like this would do: Say build it 12 feet long and 8 feet wide, and 8 feet high, and boards and battens on the outside, and boards on the inside with 6-inch space between, to be filled with sawdust, and banked up below on the outside. Of course it will have a good floor in it.—H. L. H., Iowa.

The cellar would be much the best, especially for the ½-colony.—G. M. DOOLITTLE.

We do not like bee-houses, unless they are entirely frost-proof.—DADANT & SON.

Yes, sir, I think that a house built as you propose, will do very well.—J. P. H. BROWN.

Your house would do very well if double the amount of space for sawdust was allowed. Also, some plan should be made for ventilating.—WILL M. BARNUM.

The general experience with such repositories has been unsatisfactory. You had better have it under ground.—C. C. MILLER.

I have had no experience in that line, but I should expect to lose that number of colonies in such a house in Michigan.—R. L. TAYLOR.

If you can make it warm enough to keep potatoes from freezing, it may do. If not, they had better be outdoors than in such a place.—EUGENE SECOR.

It will do very well, but must be perfectly dark. Care must be taken to put the hives out before it gets very warm in the spring.—C. H. DIBBERN.

Yes, your plan of house will work, but you must keep watch of the temperature. The house is very much larger than you need for so few colonies.—H. D. CUTTING.

A cave or cellar would be preferable. I do not believe that a house built above ground can be made to retain an even temperature sufficient to insure successful wintering.—J. M. HAMBAUGH.

In your locality I would rather try out-door packing. I would prefer 12 inch walls to those 6 inches thick, in the clear. You have almost too few bees now to keep such a room warm in a cold time, and you do not mention artificial heat.—JAMES HEDDON.

I do not believe that it will do. If the walls were 12 inches instead of 6, it would be better. In this climate (Indiana) I would prefer to leave them on the summer stands, with plenty of ventilation at the bottom, and sawdust or other packing on top.—M. MAHIN.

Yes, this will make a good bee-house, but I would prefer 12 inches of sawdust rather than 6. After all, I would prefer the hives on the summer stands, properly protected. See a short article on the use of straw mats in this issue.—J. M. SHUCK.

I do not think that the 6-inch sawdust space is enough for safe wintering in a bee-house above ground, in Iowa. Such a house, constructed with two feet of dry earth over the bees, and on all sides, would no doubt be a great success.—G. L. TINKER.

Such a house will not do. The wall would need to be 12 or 15 inches thick. Why not dig in the earth, roof over, and so make an out-door cellar? For our severe Northern winters, such a depository is much safer than a house, unless the walls of the latter are double, and enclose a very wide space.—A. J. COOK.

Much will depend. I keep my bees entirely on the summer stands, with even less protection. More depends upon preparation for winter, in the in-

terior of the hive, than the outside. Everything else being all right, I think that your plan will prove a success.—
J. E. POND.

Do not build a house to winter bees in. Build a cave on the Doolittle plan, or winter out-doors in chaff hives. But is your cellar really too small for 12½ colonies? If in the old American hive they would of course take up considerable room, but in any modern hive, that will tier up, 12½ colonies will not take up much room.—MAHALA B. CHADDOCK.

I cannot say how such a building would answer for wintering bees further north, but I should think that a 6-inch sawdust wall would hardly keep the temperature above the freezing-point in this (Kentucky) more moderate climate, at all times. I should think that a space of 12 inches of sawdust would be much safer. Somehow or other, a house, if just a little too cold, becomes the worst sort of a place to winter bees safely.—G. W. DEMAREE.

The trouble with such above-ground repositories is that they cannot be kept at an even temperature without considerable trouble and expense. Such buildings have generally been a failure—especially where the walls are so thin as you suggest. The walls should be at least double the thickness mentioned, and even then are not to be recommended.—THE EDITOR.

Convention Notices.

1. The Northwestern Bee-Keepers' Society will hold its annual convention at the Commercial Hotel, corner of Lake and Dearborn Sts., in Chicago, Ills., on **Friday and Saturday, Oct. 11th and 12th,** at 9 A.M. Arrangements have been made with the Hotel for back room, one bed, two persons \$1.75 per day, each; front room \$2.00 per day for each person. This date occurs during the Exposition, when excursion rates on the railroads will be one fare for the round-trip, good from Oct. 10 to 14, inclusive. There has been a fair crop of honey in the West, and an old-time crowd may be expected at this revival of the Northwestern from its "hibernation."

W. Z. HUTCHINSON, Sec.

2. The annual meeting and basket picnic of the Progressive Bee-Keepers' Association will be held at the residence of Mr. F. E. Dutton, near South Newbury, Geauga Co., Ohio, on Thursday, Oct. 3, 1889. All interested are invited to attend.

MISS DEENA BENNETT, Sec.

3. The International Bee-Keepers' Association will meet in the court-house, at Brantford, Ont., Canada, on December 4, 5, and 6, 1889. All bee-keepers are invited to attend, and State and District bee-keepers' societies are requested to appoint delegates to the convention. Full particulars of the meeting will be given in due time. Anyone desirous of becoming a member, and receiving the last Annual Report bound, may do so by forwarding \$1.00 to the Secretary.—R. F. HOLTERMANN, Sec., Romney, Ont., Canada.

New Posters for the AMERICAN BEE JOURNAL, printed in two colors, have just been printed, and will be sent free to all who can use them. They are very handsome, and will "set off" an exhibit at Fairs. It will tell Bee-Keepers how to subscribe, for "Subscriptions Received Here" is quite prominent at the bottom.

We will also send sample copies of the BEE JOURNAL, for use at Fairs, if notified a week or ten days in advance where to send them.

CORRESPONDENCE.

STRAW MATS.

How to Make and Use Them on Hives in Winter.

Written for the American Bee Journal

BY J. M. SHUCK.

Bees that are to be wintered out-of-doors, in the latitude of Iowa, need protection. It has been settled that

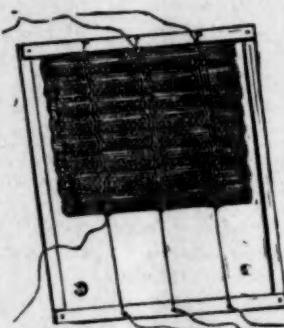


Fig. 1—Making the Straw Mats.

the chaff hive is not sufficiently portable for use where bee-keeping is carried on, on a large scale.

Some of our most successful apiarists, among whom may be mentioned Chas. F. Muth and Dadant & Son, have both recommended and used straw mats over the brood-nest in winter, to slowly pass the moisture of the hive and retain its heat. These mats are similar to those used over hot-bed sash, by gardeners, and are quite simple and easily made.

Unbroken rye-straw makes the best mats, but the straw of other grains may be used, and some of the most

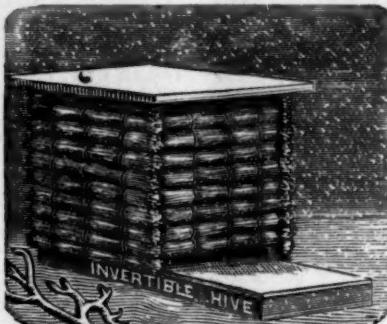


Fig. 2—The Straw Mats on the Hive.

serviceable mats I ever used were made of prairie-slough grass. Stretch a set of tarred twines over a frame (see engraving No. 1), and then fasten another set at the top of the frame for binding the bunches of straw in place.

Now take a handful of straw and place it against the nails at the top of the frame, and pass the binding twines over the bunch of straw and under the twines stretched across the frame, and either knot them each time, or carry them back to the nails in the head-board, and secure them until the next handful of straw is laid in, and so on until the mat is completed.

When the proper length of mat is reached, secure each end by tying the two sets of twine securely; then by means of a stiff, straight edge, nailed lightly to the frame, and a broad, sharp chisel, cut the sides of the mat even and smooth, and to the exact size wanted.

I make for winter protection, one mat just the size of the top of the hive, and lay some ¼-inch strips across the tops of the frames, and then lay on this a piece of wire-screen cloth to keep the mice out, then lay on top of this the mat just described. Then I make two mats just large enough to cover the ends of the hive and ends of the mat on top of the hive, and hang them on top of the hive by twines secured to each, and passing over the mat on top of the hive.

I then make two mats of proper size to cover the two sides of the hive, and the mats at the ends of the hive and on the top of the hive, secured in the same manner as the mats at the end of the hive; then a good board that does not leak, to cover the whole, with a suitable weight to keep it from blowing off; and a piece of twine tied around the whole to prevent the mats blowing out and away from the hive, completes the outfit quite perfectly.

I may add that I use a rim equal to half the depth of the brood-chamber, under the hive—in fact, one-half of an empty brood-nest is devoted to this purpose, and the hive prepared thus, appears as in engraving No. 2. Two sticks laid under the edge of the front mat provides an entrance and exit to the bees.

Des Moines, Iowa.

WOODEN CELLS.

A Hive with Wooden Combs, Said to be a Non-Swarmer.

Written for the American Bee Journal

BY PROF. A. J. COOK.

I have a colony of bees in the Aspinwall wooden-comb hive. They are rapidly storing honey in the wooden cells, and eggs are laid in the cells by the queen. Mr. Aspinwall says that they breed in these wooden cells as well as in wax comb.

The wood is coated with a thin layer of wax. Mr. Aspinwall thinks

that these hives are non-swarming. His theory is that bees never swarm unless they have drones or drone-brood. In this hive the cells are all worker size, and cannot be changed to drone size.

Of course the combs can never break down. The wood in the frames that I have, is basswood, and the bees are tearing it slightly. Mr. Aspinwall says that they will not do this if the wood is pine.

Mr. A. and one of his neighbors have tried this style of comb for two or three years, and are satisfied of its value. Of course the hive is very heavy. If it is a perfect non-swammer, it will be valuable.

The machinery to make the combs is expensive, but the hives can be cheaply made. Mr. A. has secured a patent on this comb. I think that there is no doubt but he is justly entitled to it, as I believe it is new.

Agricultural College, Mich.

HONEY.

It is Not "Digested," but Concentrated, Nectar.

Written for the American Bee Journal

BY J. W. M'KINNEY, M. D.

The article on page 523, by Prof. Cook, would seem to demand a reply from me. I should have done so sooner, but for business engagements that occupied most of my time.

In this short reply, I shall try to avoid the contemptuous manner that cropped out so plainly in the Professor's article. He accuses me of being ignorant of the matter of which I wrote. He also says, "Nearly every assertion made," in my article, "is untrue, as any doctor ought easily to convince himself." "Cane-sugar fed to bees is changed to a glucose-like sugar, and from a neutral to an acid substance."

In answer to the Professor's contemptuously sounding interrogations, I would say that I know what "litmus paper is"—have been familiar with its use for many years; and Fehling's test for glucose, also. With these means of acquiring knowledge at my command, I fail—sadly fail—to find any evidence that nectar gathered by the honey-bee is "digested" by the insect to "make" it into honey.

From reliable sources, we learn that honey contains crystallizable sugar, and, according to Soubiran, two other kinds of sugar, one of which is changed by acids, and has the property of turning to the right the plane of polarization, and the other not acted on by acids, and possessed of a strong left-

hand rotating power. In addition to these saccharine substances, Guibourt says, "Honey also contains mannite and a vegetable acid."

It does seem to me that the Professor would recognize the fact that uncrystallizable sugar is generated by dissolving cane-sugar in water, and subjecting it to a sufficient heat for 24 to 48 hours, in an open vessel. The length of time necessary for such generation depends, to a great extent, upon the consistency of the syrup. Thin syrup takes on this change more readily than thicker, and occurs as readily outside the hive, and independent of the bees, as when fed to them.

The presence of such uncrystallizable sugar in sugar-cane molasses, is certainly not due to having been digested by bees. The presence of this sugar is an isomeric form of glucose, exists in honey, and in the juices of fruits, and in nectar.

The Professor has signally failed to prove the proposition, or to show that honey is "nectar digested by the bee." To simply assert it, does not prove it, by any means. His chemical formula for honey ($2 C_6 H_{12} O_6$) is as foreign from proving it "digested nectar," as the formula given by Fownes for gum-arabic (which is $C_{24} H_{22} O$) is foreign from proving that common cane-sugar is the same substance, the formula of which is written precisely the same, ($C_{24} H_{22} O_{22}$).

I did not say in my former article that "nectar and honey were identical;" but I did mean to say, and would here repeat, that whatever the change in nectar while undergoing the process of concentration, that change is not due to the digestive function of the bee. The rational conclusion is, that honey is nectar concentrated by the action of heat and atmospheric conditions. That honey is not always of the same consistency, even when the nectar is gathered from the same source, is due to atmospheric conditions.

Perhaps the Professor would tell us that thin honey, with a tendency to ferment, as is sometimes the case with extracted honey, is in consequence of the bees that gathered it having been troubled with indigestion or dyspepsia.

I agree with the Professor when he says, "We never gain anything by concealing or misrepresenting the truth;" and I would add, neither do we gain by adhering to an error. "Tell the truth" is the good motto; and the Professor thinks he would be carrying this motto out by continuing to call honey "digested nectar."

On his suggestion, I will beg the pardon of bee-keepers, and carry out the above motto, calling honey *nectar concentrated by heat and atmospheric*

influences. At the same time I would insist that the physiological function of digestion of the honey-bee, be not diverted from its legitimate office to that of a laboratory for "making" honey. Nectar, digested by the bees, would not be honey, but according to physiological laws it would be chyme.

Camargo, Ills.

[The foregoing article is somewhat caustic, but the Professor's article was of the same nature, and called for a similar reply. We want to learn all that can be said on this subject, and hence have given place to the articles of Prof. Cook, Dr. McKinney and others. See editorial on page 611.—ED.]

APICULTURE.

Modern Salient Features in its Advancement.

Written for the American Bee Journal

BY HENRY K. STALEY.

I notice among a good many bee-keepers of America, that there is a feeling or inclination springing up, which is prejudiced against a man patenting the productions of his brain. And, why should he not? He uses up many hours of valuable time—during each second of which he travels with the earth in its ambit around Old Sol at the rate of 18.38 miles per second; and over which he will never pass again—at least when quick; unless the components or elements of his body, after disintegration have, through various changes, been imbibed, and through assimilation converted into the flesh of other human beings or animals; for it is within the bounds of possibility that the apple which caused the fall of our first parents, may have composed part of the apple by means of which Sir Isaac Newton was able to discover the laws of gravitation, or the force of centripetal; and lavishly spends, if he's got it, his money, trying to germinate the embryo of some new invention, as yet incased in its hard-shell covering, not knowing whether he will be able to get back the money expended or not. The above anacoluthon may not be pardonable, but I just wanted to show how valuable time is.

COMPENSATION FOR OUR SERVICES AND WORKS IS IN ACCORDANCE WITH HUMAN NATURE.

Show me the man that is willing to fill a public office without receiving any emoluments therefrom; show me the man that is willing to work day

after day without receiving any compensation for his labors; and I will show you the man that is able to eat his hat. Some people think it more pleasant to receive than give—especially those politicians who are the recipients of public offices from which emanate *pinguis emoluments sine magno labore*.

Why, do you think that a person would run for President of the United States, if he has more money than that office pays; or, if money is no object to him, unless he had some object in view, such as praise, honor or glory? In this case he receives the praise and honor with the concomitant pecuniary interests as a secondary object. So, also, with an inventor; he not only wants the prerogative to protect his invention by a patent, but he wants the renown emanating from the article patented itself.

HONOR TO WHOM HONOR IS DUE.

And it is right that his name should go down on the pages of history as a benefactor of mankind, glittering like the diamond—throwing out scintillations of light to future generations as they come and go—among the galaxies of the brilliant names of generals, historians, doctors, astronomers and poets.

Do you think that a person would sit up at night,
While the mopping owl doth to the moon complain
Of such as wander near her sacred bower.

and have his ears made the recipients of other nocturnal noises, even into that arching hour of night—when the Northern bear, tired of prowling around in the fold of the North Star, has slunk into his den—which holds the rest together, thus robbing his brain and limbs of their needed quietude, working on some book or invention—if he did not expect a guerdon? If it is a history into which he has thrown the coruscations of his genius, and made things in tradition to appear to put on the countenance of truth, like Prescott, a man, who although blind apart of his time, wrote histories so wonderful that there was no need of treating them pragmatically, because the imagination could portray and picture the cause and results well enough to suit the mind's eye; and, I repeat it, although blind, yet, like our own Huber, persevered in his studies, rendering true that old aphorism, viz :

For nothing else is history
But pickle of antiquity
Where things are kept in memory
From stinking,

had a right to have his histories copyrighted, so that no one else could steal his writings, and thus wrest from him the emoluments emanating therefrom.

So the inventor of the interchangeable brood-chamber and reversible alveary, thus showed to apiarists that, albeit the Langstroth hive has been the standard hive for years, yet the time has come, when in the face of terrible drouths, reduced prices and the like, that a better hive was needed.

Some people think that certain inventions cannot be perfected to a greater degree. Such thoughts should be relegated to the mixen of the intellect—the *omnium gatherum* in Pandora's box of useless knowledge. And yet, to show how ridiculous it is to think in the aforesaid manner, let me show it by an example:

Edison, the great inventor, has been making new inventions in the art of telegraphy—inventions, which if put into operation, would facilitate the powers of telegraphy nearly bi-fold. The Western Union Telegraph Company seeing this, and knowing that if these inventions came into the hands of a rival company, that that company would soon be able to surpass and outshine it, has been buying up these inventions at the inventor's price. The formula for buying is like this: "How much?" "Check, \$100,000."

When the Rev. L. L. Langstroth, the inventor of the movable-frame hive, and therefore *justly* able to determine the merits of the hive, wrote that vigorous article published on page 294 of the AMERICAN BEE JOURNAL for 1888, the *vox populi* against it, should have held its breath a little longer; but as it did not, the result was quite a war in the columns of our bee-periodicals.

Jealousy in apiculture is a thing not to be overlooked, because it is a worker of evil to our pursuit; therefore it naturally follows, what is the cause of all this "hue and cry" about an invention that is revolutionizing many of the ways of bee-keeping, and at the same time purveying a good to humanity? Is it envy? Then those of our apiarists who are envious concerning certain late inventions, and believe in the Bible, should remember that it says: "Thou shalt not covet thy neighbor's wife, thou shalt not covet thy neighbor's house, nor his man-servant, nor his maid-servant, nor his ox, nor his ass, nor anything that is thy neighbors." But nevertheless we know that there are some people who cannot master their fickle nature, and let jealousy reign supreme and uncondemned; and, pushed on by hatred or the love of gold, it grasps them much after the following manner:

But gnawing jealousy out of their sight,
Sitting alone, his bitter lips did bite.

Is it that they had the idea in their heads years ago, or fabricated the inventions, and were ashamed to get them patented, but preferred to keep

them for their own private use? Then they should remember that he who goes to the trouble of patenting his inventions, and bringing them before the public into practical use, standing all the cavil and calumny besides phlebotomizing on the veins of his pecuniary life-blood, should most rightfully be considered its inventor, as Langstroth was of the movable-frame hive, and Davis of the discovery whereby the worker-larve of one race of bees can—with a tiny spoon or goose-quill—be transferred to queen-cells of a different race; thus in time changing the whole colony.

Luck is not the motive whereby inventions or success come, but hard labor. If any one thinks that the Langstroth and later hives came by luck, he is mistaken; for "Luck is *ignis fatuus* (a will-o'-the-wisp); you may follow it to ruin, but never to success." We must reason from what we know, if we desire to avoid a procdence in any profession or experiments. This is the *cause of failure* with a great many uninited bee-keepers. They do not reason from what they know, and instead of starting in with one or two colonies, learning the business as they go along, they dash headlong, prone into the waves of bee-keeping, and not being able to swim in apicultural waters, down they go, leaving invectives behind them against our pursuit. Therefore, in order to avoid an aparian prolapsus, we see that we must reason from what we know, and build up in knowledge as we go along.

The truth of this is quickly seen by reading of some of Langstroth's first inventions. Before he had invented the movable-frame hive, he used what we now call top-bars; the bees starting the combs on the under surface of the bars, and, building them downward, they attached the combs to the sides and bottoms of the hive. Therefore, it will be seen, that he had to cut the combs loose from the sides and bottom of the hive, before he could lift them out. This, of course, was a great improvement over the old box-hive, but still it did not suit Mr. Langstroth.

Then, by reasoning from what he knew and saw, the idea struck him, of nailing uprights to the top-bar and a slat on the bottom connecting them, the uprights. That it was a success, we, apiarists of to-day, know full well.

No, it does not pay to plunge precipitately into bee-keeping—better "prospect," as the speculator says, or according to John Lilly, "Cut thy coat according to thy cloth." Yes, it was days, months and even years of toil linked together with the hope of receiving some reward in the end; a reference to which is given by our

Constitution, where it says, "Congress shall have power to promote the progress of science and useful arts, by securing for limited time to authors or inventors the exclusive right to their respective writings and discoveries."

COPYRIGHT AND PATENT LAWS.

And would we now tear down that defense surrounding book-writing, inventions and the like, which our forefathers built up and fostered, by throwing a wall of protection around nearly a hundred years ago? In 1790 a law was enacted, giving to authors the exclusive right to their writings for 14 years, with the liberty of making a renewal for a like period. In 1831, the term was made 28 years, with the right to renew for 14 years longer, thus making at its extreme limit for a copyright 42 years.

In 1790 Congress made provision for giving to inventors the exclusive right to their inventions or discoveries, and from that time up to the present day, the number of inventions have been accruing annually. Originally 14 years was the time for which a patent was valid, but in 1870, 17 years was made the limit.

Of course, there are some firms who take advantage of the copyright and patent laws, by leaving the patent on their invention run until its time is nearly expired, when, through some new device on the machine, another patent is obtained, giving to them the exclusive right for 17 years longer. Whether this be a manifest injustice to the people at large, absonant or consonant with the Constitution of the United States, it is nevertheless done; and this only shows the immense importance of the patent-right itself.

It is not incongruous here to ask how our country under its copyright and patent laws has prospered; and to that intent I will now apply myself.

Over 600,000 applications have been filed for patents since the year 1836, and about 400,000 patents have been granted, while the books that have been issued are too numerous to mention. Inventiveness seems to have become a national trait, even seen in the small child to the hoary-headed man, and almost every branch of business.

The United States issues four times as many patents as her maternal country, albeit Great Britain started the great wheel of civilization and progress to revolve hundreds of years ago. There was given, some years ago, at the Electrical Exposition in Paris, five gold medals as rewards for the greatest inventions and discoveries of the age. Well, how many do you think Uncle Sam took? Just five.

Therefore I ask, should the apiarists of America have that prerogative of

patenting—which has built up our pursuit and made it recognized by our Government—taken away because a few persons who are not in favor of adhering to the ways of our forefathers, or else are goaded on by jealousy, or with the thought that the very same idea was in their mind years ago, or that they may have machinated the invention, but did not get it patented? I answer no, most emphatically, no!

If these men let procrastination rule over their ideas, which might have generated an invention, it serves them just right to lose it. Let them remember that,

The mill will never grind again,
With the water that has passed.

When they made the invention or discovery which, if patented, would have made them the legal inventors, they desired to be the inventors; but through lack of energy or perseverance, let the goal slip from their fingers; and now, when somebody else has—without the knowledge of any such thing having been made before—made an invention, and after having procured a patent-right for the same, brings it before the public, he kicks up a racket, and lays claim to the inventorship.

COURAGEOUS INVENTORS OF THE PAST.

It is a good thing that the world has some men who dare to bring their inventions before the public gaze; inventions which they know in time will revolutionize certain pursuits, sciences, etc.; as Ericson's iron-clad, the "Monitor," did that of naval warfare. You may remember what Themistocles said to the Greeks, when the Selphian oracle told them to seek safety behind wooden walls; he said, their ship; but in a naval contest hodiernal, there is not the least shadow of a show behind wooden walls, when one bomb, loaded with dynamite, is able at a single explosion to blow a whole ship to mammocks.

Let us take Galileo as another example of those men who dare to bring their discoveries before the public. In the night-time of Jan. 7, 1610, he espied three minute stars in a straight line, and a few evenings following, a fourth around the planet Jupiter. From the first satellite, by means of its eclipse, Roemer was able to solve that great problem—the velocity of light, which was found to be 185,410.33 miles per second, taking the mean distance of the earth from the sun at 91½ millions of miles.

This, of course, gave more confirmation to Galileo in his belief of the heliocentric theory, which recognizes the sun as the centre of the Solar System, around which all the other planets revolve. This, as will be seen, was in accordance with the Copernican

theory, both of which were *vis-a-vis* to the geocentric theory, the theory which the church recognized at that time, namely, that the earth was the centre and around it the sun revolved. Picture the earth, by its force of gravitation, making the sun circle around it, when, if you will, mete out four bushels of wheat, and then take out but one grain, you have the *relative* size of the earth as compared with that of the sun.

THE ADVANTAGES OF MODERN TIMES.

In those days, how different it was from this land of liberty of ours! The church tried to settle all the great questions of astronomy by the Bible, but we know that book is not the place to go to settle questions of astronomy or apiculture, but religion. Accordingly they accused Galileo of imposture, heresy and blasphemy. They summoned him to appear before the Holy Inquisition, on an accusation of having taught the heliocentric theory; and having commanded him to renounce his belief as a heresy, on pain of incarceration, the church had pretty quiet rest for about 16 years. But in 1632 Galileo published his work, appalled the "System of the World," by which he tried to show the truth of Copernican theory.

On account of this, he was summoned to appear before the Inquisition of Rome, and on his knees commanded to curse his doctrine of the earth moving around the sun; yet, it is related, that when he arose from his knees, he stamped his foot on the earth, and in an undertone said, "E pur si muore"—and yet it moves.

If it had not been for Daniel Boone, in his persistent efforts toward civilization, who, at one time, was the *only* white man in Kentucky, where would our mighty West have been to-day?

If it had not been for Roemer, in discovering the rapidity of light, how would we have been able to tell the length of time it takes the light to travel from the nearest star—a Centauri—to reach us? But having the rapidity of light from Roemer, and the parallax of that star having been determined (from it the distance), we were then able to determine the time, which is 3.6 years; it being 20,832,000 millions of miles from us, or, in other words, twenty trillion, eight hundred thirty-two billions of miles away.

If it had not been for Langstroth, who by his persistent efforts brought into practical use the movable-frame hive, where would our pursuit have been to-day? It would have been as yet in the days of the honey-comb shambles, when comb, larvæ, farina and honey were squeezed together to get that delicious liquid—honey. It

would have been as yet in the slough of fogyism when box-hives reigned supreme, and had bee-moths by the thousands. Thus we see the salient importance of a revolutionizing invention or discovery in being brought before the public.

SUPERSTITIONS OF THE OLDEEN TIMES.

Do you think that if the men of this age had to fight like Galileo, in bringing their inventions or discoveries before the public, that the land would be in such a prosperous condition as it now is?

To show how superstitious people were toward the close of the last century, let me quote a little incident:

Lord Campbell made the journey from Edinburg to London in three days and three nights; but judicious friends warned him of the dangers of it, and said to him, that some people who were so *rash* as to attempt it had really died from the *mere* rapidity of the motion. People now-a-days need not be afraid of the telephone, electric street railway, etc., but should remember that many of the arts employed by the Egyptians are lost arts.

The pyramid of Cheops—which covers a surface of nearly eleven acres—and is 487 feet high, stands to-day in gloomy Egypt, the dumfounder of all modern mechanical powers. The art, whereby the human body can be preserved for six thousand years, is unknown to us; hence these things are to us as lost arts, and for any one to be averse to patents in bee-keeping, is simply nonsense. I say *fiat lux*—let the light shine—for our pursuit. And I hope the saying, *ubi apes, iti mel*, will become truer and truer with respect to men, *i. e.*, where brainy men are, there may be inventions that will be patented and not stored away, like the miser does his money, by some gormandizing snouser for his own use, being too lazy to get his inventions patented, and purvey a good to humanity.

DEMONETIZATION OF OLD INVENTIONS.

And, if by their inventions—so long as they render a good to humanity—the demonitization of older inventions is effected to a greater or less degree, by all means let us have them. Who would think of giving up an elegant mansion for an old log-hut, where the hyperborean blasts whistle in and chill you to the marrow; the watch for the sun-dial, the clock for the clepsydra, the telegraph or the telephone for the ancient ways of sending news, or the quick short-hand for the slow long-hand writing, when rapidity is wanted. Then why is it, that some people are averse to patenting? It must be their idiosyncrasies.

Pleasant Ridge, O.

QUEEN-REARING.

The Rearing of Perfect Queens for Home Use.

Written for the American Bee Journal
BY FRANK COVERDALE.

There has been considerable written on this subject, yet there will perhaps always be room for discussion. This rearing of perfect queens has always (ever since I have kept bees) been of very much importance to me, for it is my belief that we should have queens reared under the best of circumstances—that means, a plenty of queen-food or royal jelly, even so much so as to have a large amount left after the queen has hatched.

My first experience was to take a frame of brood from one colony and place it in a hive by itself, leaving the few bees that would stay, build there cells and care for them until ready to hatch. These queens were the poorest I ever saw, and their average life was not over one year, and they would be very apt to fail before the next year's honey harvest was gathered.

These queens would lay very small eggs; still I have not noticed any difference as to the working-quality of their offspring. It was the small amount of royal jelly that spoiled my queens.

I next adopted the Alley method, which proved to be much better, but I was not entirely satisfied with this, for the queens were not vigorous enough, or, in other words, they were stinted from the proper amount of royal jelly required to the development of a fine, large queen. So I left this, and went to work rearing queens (whenever I had a chance) under the swarming fever. In this way I got some fine queens to stock my apiary with—good, prolific queens.

This season I have been rearing some queens by the Doolittle method of "Scientific Queen-Rearing," which also gave me good, vigorous queens. One thing I did not like was, that so many of the cups would be respected, and then again the royal jelly placed in the cups would all be sipped up or removed by the bees, even so clean as to leave the larvæ for a time without nourishment. Of course, after this they were fed liberally, and the development went on finely. This being the state of affairs, I began to think over the matter thus:

Why can I not have queenless bees, or bees prepared under the Alley method, to build cells, and just when they get the cells ready to cap over, take out the large larvæ, and place in the same cells small larvæ, not over 30 to 40 hours from the egg? These I

found to be well accepted, and the royal jelly was not removed. Here I had a good start in queen-food. This suited me very much.

It soon came to me, that the bees would have double the time to feed the cells, and so they did to almost double the amount of royal jelly, thus causing the bees to build the cells longer, for it is the filling up of the cells at the base, that causes the bees to build long queen-cells; so when the queens hatch, I find in almost every instance, $\frac{1}{2}$ to $\frac{1}{3}$ of the queen-food left in the bottom of the cells.

This plan has not failed in producing queens which are, in my opinion, of the best type in all respects, if bred from good stock. There need be no pains taken as to the stock, when the cells are started. I can get double the number of cells well supplied in this way, and am detained only about three days longer for my queens; so I will have gained time.

Welton, Iowa.

CONVENTION DIRECTORY.

	Time and Place of Meeting.
Sept. 1.—	Maine, at Livermore Falls, Me. J. F. Fuller, Sec., Oxford, Me.
Oct. 3.—	Progressive, at South Newbury, Ohio. Miss Dema Bennett, Sec., Bedford, O.
Oct. 11—12.—	Northwestern, at Chicago, Ills. W. Z. Hutchinson, Sec., Flint, Mich.
Dec. 4—6.—	International, at Brantford, Ont., Canada. R. F. Holtermann, Sec., Romney, Ont.

In order to have this table complete, Secretaries are requested to forward full particulars of time and place of future meetings.—ED.

SELECTIONS FROM OUR LETTER-BOX

Robbing and Carbolic Acid.

P. L. Forgan, Sloan, Iowa, on Sept. 16, 1889, says:

I find it is not generally known, even amongst experienced bee-keepers, that a few drops of carbolic acid, on wet grass or hay, placed in front of a hive that robbing has begun on, very quickly dispels the robbers; and where confusion and riot formerly prevailed, order and quiet reign again.

Well Satisfied with Results.

W. B. Thorne, Glenn, Kans., on Sept. 16, 1889, writes:

I am not willing to give all the credit of a fair honey crop to the AMERICAN BEE JOURNAL, but I will divide the honors. I was advised by the BEE JOURNAL to keep my bees in the cellar as long as danger of cold weather ex-

isted, but they would not hibernate, so out they went, only to test their ability to withstand the coldest of weather of last winter, which came in February. This "hibernated" effectually some entire colonies, and from 1 to 2 quarts of each of the remainder. This reduced my prospects very materially. Considering the poor commencement for the season's work, I cannot complain, having taken an average of 100 pounds of extracted honey per colony, and 2 pounds of comb honey; besides probably an average of 20 pounds yet untaken. I find that the profit of a 160-acre farm lies chiefly in 31 colonies of bees, the honey of which sells readily at 10 cents for extracted.

Taxing Bees in Iowa, etc.—G. B. Olney, Atlantic, Iowa, writes:

I feel very much indebted to the AMERICAN BEE JOURNAL—and why should I not, when the perusal of one article from the pen of a good, practical bee-man, set me to cogitating like unto, "Why can't I do that?" Yes, that old comb, uneven, the cells half-filled with bee-bread, the balance with honey, just put it on a warm stove; no quicker said than done, and the next day I sold that honey for cash in hand, \$2.90. Just send that paper right along all the time. That \$2.90 will pay for it for about three years.

Our bees are being assessed for taxation at a cash value of \$2 per colony. Some owners claim that bees are a perishable article, and not taxable, and thereby refuse to list them. Are bees taxable? Stock over six months old, on the first of January of each year in this State, is subject to taxation. Worker bees are not six months old on Jan. 1. Please answer through the BEE JOURNAL, as there are others that are also in the dark.

[According to that interpretation, the worker bees would not be taxable, but the queens might be. We are not conversant with Iowa laws, and leave the matter to be answered by our Iowa lawyers.—ED.]

Making Frames for Hives, etc. Locke Ferree, Milroy, Ind., on Sept. 12, 1889, writes:

The honey season is about over here, and I have taken about 175 pounds of comb honey. I had 4 colonies in the spring, and increased them to 11. I am going to make some new hives in the winter. I am thinking of making the end-pieces, that connect the top and bottom bars, 1½ inches wide, and the top and bottom bars ½ of an inch,

setting the frames on a metal-rabbit at the bottom of the hive. 1. Would the bees propolize the ends of the frames so that they would be hard to get out (if the edges of the ends were planed smooth), made in the above way? 2. How close should the ends of the frames come to the ends of the hive?

[1. The closed-end frames have been used for many years. The "Quinby" frame was made in that way, but the end-bars, extending below the bottom-bars, served as "legs" for the frames, and "stood" on the bottom of the hive. If they are planed smoothly, and fit tight, the bees will not think it necessary to propolize them, and they can be manipulated with comparative ease; but if they do not fit tight, there will not be much pleasure in manipulating them.

2. Just leave space enough for raising and lowering them. The passageways for the bees should be over the top and bottom bars, if the hives are properly constructed.—ED.]

Good Average Per Colony. Fayette Lee, Cokato, Minn., on Sept. 12, 1889, says:

I commenced last spring with 41 colonies of bees, and have increased them to 76 colonies, and have taken 5,300 pounds of honey, 900 pounds of it being comb honey, an average of 130 pounds to the colony, spring count. The honey harvest is over for this year.

Hiving Swarms, etc.—Miss Lucy J. Sherman, Hanover, Vt., writes:

I was much amused by the article on page 521, by W. Hood, especially in his account of climbing the tree, while his wife and son stood by and ridiculed him. I never climbed a tree after bees, but I know just how it feels to see them swarm, and not have the slightest notion what to do. If I were in that man's place, the first thing would be some queen-traps, and if there was some mistake about leaving one off, or there was one hive which a trap would not fit without some tinkering, and I had not tinkered it, and the first I knew there was the swarm in the tree—I should say: "Wife, bring me an old sheet. George Washington, climb that tree and tie this rope around the limb that the bees have clustered on." Then I should take hold of the rope, and give the tree a quick jerk, and the bees would fall on the sheet,

which I should fold over loosely, and carry to the hive. If this be repeated until the cluster does not return to the tree, you may be sure that you have the queen, and your swarm is safe.

Next year I shall try putting one hive above another, leaving the new swarm on the "1st flat," and the old colony on the "2d flat." That is educating bees to live in "flats." I have never had but one swarm on Sunday, and that was a "bee-attitude" not mentioned in the Sermon on the Mount.

Bees Did Well.—W. H. Fowler, Jennings, Mich., on Sept. 17, 1889, says:

My bees did very well this season. I had 2 colonies, spring count, and increased them to 5. I took 85 pounds of honey from one, and from the other I got the increase. The "Little Wonder" bee-smoker I find is a "daisy" to handle bees with.

Honey and Increase.—Henry Van Tress, Oakland, O., on Sept. 16, 1889, wrote as follows:

I commenced the season with 36 colonies of bees, mostly weak, and have taken about 2,000 pounds of honey from them, and increased to 70 good, strong colonies. I took the premiums at our Fair, on honey and bee-hives. It was not very well attended, on account of there being Fairs around us.

Best Season Ever Known. Mrs. B. J. Livingston, Center Chain, Minn., on Sept. 16, 1889, writes:

Old bee-keepers say that this has been the best year for honey that this (Martin) county has ever known. The season has been very dry, but linden, white clover, buckwheat, and now golden-rod and Spanish-needles, all seemed to furnish honey already ripened, and all ready to seal up, as fast as gathered. It has been my first season with bees, and I dare say that I have been too much interested in studying them, to make the most of them; yet my 4 colonies have given me over 200 pounds of comb honey, mostly in one-pound sections; and I have increased them to 8, with 8 Simplicity brood-chambers heavy with honey—and surplus still coming in.

A Favorable Word from any of our readers, who speak from experience, has more weight with their friends than anything we might say. Every one of our readers can lend us a helping hand, in this way, without much trouble.



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BUSINESS MANAGER.

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Your Full Address, plainly written, is very essential in order to avoid mistakes.

If You Live near one post-office and get your mail at another, be sure to give the address that we have on our list.

Give a Copy of "Honey as Food and Medicine" to every one who buys a package of honey. It will sell lots of it.

Dr. Miller's Book, "A Year Among the Bees," and the AMERICAN BEE JOURNAL for one year—we send both for \$1.50.

If you Lose Money by carelessly enclosing it in a letter, it is without excuse, when a Money Order, which is perfectly safe, costs but 5 cents.

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Preserve Your Papers for future reference. If you have no **BINDER** we will mail you one for 60 cents; or you can have one **FREE**, if you will send us 3 new yearly subscriptions for the BEE JOURNAL.

Please write American Bee Journal on the envelope when writing to this office. Several of our letters have already gone to another firm (a commission house), causing vexatious delay and trouble.

Pure Phenol for Foul Brood.—Calvert's No. 1 phenol, mentioned in Cheshire's pamphlet on pages 16 and 17, can be procured at this office at 25 cents per ounce. Not being mailable, it must go by express.

In order to pay you for getting *new subscribers* to send with your renewal, we make you this offer. For each yearly subscriber, with \$1.00, you may order 25 cents worth of any books or supplies that we have for sale—as a **premium**.

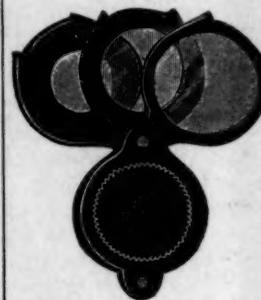
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We Club the *American Bee Journal* for a year, with any of the following papers or books, at the prices quoted in the **LAST** column. The regular price of both is given in the first column. One year's subscription for the *American Bee Journal* must be sent with each order for another paper or book:

	Price of both Club
The American Bee Journal	1.00
and Gleanings in Bee-Culture.....	2.00
Bee-Keepers' Guide.....	1.50
Bee-Keepers' Review.....	1.50
The Apiculturist	1.75
Bee-Keepers' Advance	1.50
Canadian Bee Journal	2.00
Canadian Honey Producer	1.40
The 8 above-named papers	5.65
and Langstroth Revised (Dadant)	3.00
Cook's Manual (old edition)	2.25
Doolittle on Queen-Rearing	2.00
Bees and Honey (Newman)	2.00
Binder for Am. Bee Journal	1.60
Dzierzon's Bee-Book (cloth)	3.00
Root's A B C of Bee-Culture	2.25
Farmer's Account Book	4.00
Western World Guide	1.50
Heddon's book, "Success,"	1.50
A Year Among the Bees	1.75
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Do not send to us for sample copies of any other papers. Send for such to the publishers of the papers you want.



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Red Labels for Pails.—We have three sizes of these Labels ranging in size for pails to hold from one to ten pounds of honey. Price, \$1 for a hundred, with the name and address of the bee-keeper printed on them. Smaller quantities at one cent each; but we cannot print the name and address on less than 100. Larger quantities according to size, as follows:

	Size A.	Size B.	Size C.
250 Labels	\$1.50	\$2.00	\$2.25
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1,000 Labels	3.00	4.00	5.00

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Having a Few extra sets of the AMERICAN BEE JOURNAL for the years 1887 and 1888, we will supply both these years, and 1889 and 1890, for \$3.00, until all are sold. Or we will send 1888, 1889 and 1890 for \$2.50, all by mail, postage paid. These are very valuable, and those who have not yet read them should lose no time in securing them.

We Want a Representative at all the Fairs to be held this season. The AMERICAN BEE JOURNAL is the recognized defender of the rights of the bee-keepers, against the attacks of the ignorant and prejudiced. There are thousands who would gladly subscribe to it if it were only brought to their notice, and its claims presented. When making an exhibit, please send for our Colored Posters and sample copies, and get up a club. In this way you will not only pay yourself for the trouble, but also aid the pursuit, and its defense all over the country.

Hastings' Perfection Feeder.—This excellent Feeder will hold a quart, and the letting down of the feed is regulated by a thumb-screw. The cap screws securely on. It is easy to regulate—either a spoonful or a quart—and that amount can be given in an hour or a day, as desired. By it the food can be given where it is most needed—just over the cluster. Not a drop need be lost, and no robber bees can get at it. A single one can be had for 40 cents, or a dozen for \$3.50, and it can be obtained at this office. Postage 10 cents extra.

Many Good Advertisers invite our readers to send for their descriptive Circulars, etc. It will pay to get these, and see what is for sale, by whom, at what prices, and what things are offered. Every one can learn something in this way. Please always tell advertisers *where* you saw their cards; they like to know, and we like to have them.

Prang's National Flower is the title of a beautiful pamphlet which contains two colored plates of the two most popular candidates for selection as the National Flower of America. It also has two poems, and a postal card addressed to Messrs. L. Prang & Co., Boston, Mass., with a vote to be filled up for the selection of a National flower. The pamphlet costs 25 cents, and can be obtained at this office.

Send Us the Names of bee-keepers in your neighborhood who should take and read the AMERICAN BEE JOURNAL, and we will send them a sample copy. In this way we may obtain many regular subscribers, for thousands have never seen a copy, or even know of its existence. This is one way to help the cause along.

Apiary Register.—All who intend to be systematic in their work in the apiary, should get a copy of the Apiary Register and begin to use it. The prices are as follows:

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Yucca Brushes, for removing bees from the combs, are a soft, vegetable fiber, and do not irritate the bees. We supply them at 5 cents each, or 50 cents a dozen; sent by mail, add 1 cent each for postage.

Honey and Beeswax Market.**KANSAS CITY.**

HONEY.—It is coming in slowly. We quote: 1-lb. sections of white, 15@16c.; 2-lbs., 14c. Extracted, white, 8@8c.; dark, 7c. Aug. 27. **HAMBLIN & BEARSS**, 514 Walnut St.

PHILADELPHIA.

HONEY.—That in the comb is now arriving and the demand is increasing accordingly. The outlook is still favorable for good prices for fancy honey.—We quote fancy honey in neat crates as follows: 1-lbs., white, 17@18c.; 2-lbs., 14@15c.; buckwheat 1-lbs., 12@13c.; 2-lbs., 10@11c. Of grades of all kinds generally 1 to 2 cts. less. Extracted, white clover, 8c.; orange blossom, 7@8c.; off grades, per gal., 60@70c. **BEESWAX.**—23@24c.

Sep. 5. **WALKER & MCCORD**, 32 & 34 S. Water St.

DENVER.

HONEY.—We quote: In one-lb. sections, 16@18c.; off colors, 14@16c. Extracted, 7@8c.

BEESWAX.—20@25c.

Sep. 20. **J. M. CLARK CO.**, 1421 15th St.

NEW YORK.

HONEY.—Extracted, white clover, basswood, orange bloom and California, 8c.; buckwheat, 8c.; common Southern, 60@70c. per gallon. Comb honey, fancy white 1-lbs., 18c.; fair 1-lbs., 14c.; fancy white 2-lbs., 14c.; fair 2-lbs., 11@12c.; buckwheat 1-lbs., 10@11c. Demand is good for fancy white 1-lbs., un-gassed or in paper boxes.

BEESWAX.—23@24c.

Sep. 16. **F. G. STROHMEYER & CO.**, 122 Water St.

CHICAGO.

HONEY.—It is arriving freely and we note some little accumulation, but all will be wanted later on. White clover 1-lbs., according to style of package and appearance, 13@15c. Dark 1-lbs., 10@11c.; 2-lbs., 8@8c.; fair 1-lbs., 14c.; fancy white 2-lbs., 14c.; fair 2-lbs., 11@12c.; buckwheat 1-lbs., 10@11c. Demand is good for fancy white 1-lbs., un-gassed or in paper boxes.

BEESWAX.—23@24c.

Sep. 21. **B. T. FISH & CO.**, 189 S. Water St.

CHICAGO.

HONEY.—It is selling slowly yet, but with colder weather we look for more active trade. Market is well supplied with honey, it being in many hands. In lots it can not be sold at over 13@14c., and in cases even less, if not in first-class condition. Extracted, 8@8c.; white clover and basswood, in kegs and barrels, 7c.

BEESWAX.—25c.

Sep. 10. **R. A. BURNETT**, 161 South Water St.

DETROIT.

HONEY.—New crop is coming in slowly, and sells at 14@15c. for com.

BEESWAX.—25c.

Aug. 21. **M. H. HUNT**, Bell Branch, Mich.

ST. LOUIS.

HONEY.—We quote: Choice white clover comb, 12@12c.; fair, 10@11c.; dark, 7@8c. Extracted, in barrels, 6@6c.; in cans, 6@6c.

BEESWAX.—25c. for prime.

Aug. 21. **D. G. TUTT & CO.**, Commercial St.

NEW YORK.

HONEY.—We quote: Fancy white 1-lbs., 16c.; 2-lbs., 14c. Off grades about 2c. per lb. less. Buckwheat 1-lbs., 11@12c.; 2-lbs., 9@10c. Extracted basswood and clover, 8c.; orange bloom, 8c.; California amber, 7@7c.; buckwheat, 6@6c.; Southern, 60@70c. per gallon.

HILDRETH BROS. & SEGELENKIN, 28 & 30 W. Broadway, near Duane St.

Sep. 10. **BOSTON.**

HONEY.—It has arrived quite freely, but owing to warm weather, prices have had to be shaded. Our market-to-day is: White 1-lbs., 16@18c.; 2-lbs., 16@18c. Extracted, 8@8c. We look for better prices later, and would not advise bee-keepers to rush honey on the market.

BEESWAX.—None on hand.

Sep. 9. **BLAKE & RIPLEY**, 57 Chatham Street.

CINCINNATI.

HONEY.—We quote extracted at 5@8c. per lb. Comb, 11@16c. Demand fair for all kinds. Arrivals of extracted are good, while good comb honey is scarce in this market.

BEESWAX.—Demand is good—20@22c. per lb. for good to choice yellow, on arrival.

Sep. 11. **C. F. MUTH & SON**, Freeman & Central Av.

KANSAS CITY.

HONEY.—It is selling very slowly at 14c. for 1-lb. white comb, and the prospects are for lower prices. We have been trying to hold the market to 14@15c., but parties in Iowa and Illinois are offering and selling white 1-lbs. at 12@12c., delivered here and at other points in amounts receipts are large, and in order to sell we will have to meet these prices.—Extracted white, steady at 7@8c., amber, 6@6c.

BEESWAX.—25c.

Sep. 14. **CLEMONE, CLOON & CO.**, 4th & Walnut.

MILWAUKEE.

HONEY.—New crop is coming in and of very fine quality. Demand is fair and values easy. Choice white 1-lbs., 14@15c.; 2nd quality 1-lbs., 12@14c.; old 1-lbs., 10@12c. Extracted, white, in tins and pails, 6@6c.; in barrels and kegs, 7@8c.

BEESWAX.—22@25c.

Sep. 5. **A. V. BISHOP**, 142 W. Water St.

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